

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) An Internet telephone system for voice communication between a telephone subscribing to a first voice network and a telephone subscribing to a second voice network via a network using an Internet protocol, comprising:

a plurality of label switch routers configured to use a label switching technique;

a first media gateway coupled to a first one of the plurality of label switch routers and a first signaling transfer point connected to said first voice network;

a second media gateway coupled to a second one of the plurality of label switch routers and a second signaling transfer point connected to said second voice network;

a path control unit configured to:

store information identifying connection relationships between telephones in the first and second voice networks and the first and second media gateways, the information including telephone numbers of telephones in the first and second voice networks,

store connection relationships between the first and second media gateways and the plurality of label switch routers,

store a maximum band settable between adjacent ones of the plurality of label switch routers, and

determine whether a first path having a first band larger than a band necessary for transferring a voice over Internet protocol (VoIP) packet between said first label switch router and said second label switch router exists, and

when it is determined that the first path having the first band does not exist, set a new path ~~having a band that is equal to or more than double the band necessary~~ for transferring the VoIP packet; and

a packet control unit, coupled to said path control unit, configured to:

instruct said first media gateway and said second media gateway to transfer VoIP packets via the first path or the new path.

2. (previously presented) The Internet telephone system of claim 1, wherein the new path has a band that is equal to or more than a hundred times the first band.

3. (previously presented) The Internet telephone system of claim 1, further comprising:
a route control unit configured to control said plurality of label switch routers.

4. (previously presented) The Internet telephone system of claim 3, wherein said route control unit is provided to each label switch router.

5. (previously presented) The Internet telephone system of claim 3, wherein said route control unit is connected to all of the plurality of label switch routers.

6. (currently amended) A path setting method of setting a path to which a band is ensured on a network using an Internet protocol connected between a first voice network and a second voice network to execute voice communication between a telephone associated with the first voice network and a telephone associated with the second voice network, comprising:

storing information identifying connection relationships between telephones in the first and second voice networks and first and second media gateways, the information including telephone numbers of the telephones in the first and second voice networks;

storing connection relationships between the first and second media gateways and a plurality of label switch routers, the plurality of label switch routers including edge label switch routers;

determining whether a first label switching path having a residual band larger than a first band necessary for transferring a voice over Internet protocol (VoIP) packet between two edge label switch routers exists; and

setting a new label switching path ~~having a band that is equal to or more than double the first band,~~ when it is determined that the first label switching path does not exist.

7. (currently amended) The path setting method of claim 6, wherein said new label switching path has a band that is equal to or more than a hundred times the first band.

8. (currently amended) A call control apparatus for setting a path ~~to which a band is ensured~~ on a network using an Internet protocol connected to a first voice network and a second voice network to execute voice communication between a telephone coupled to said first voice network and a telephone coupled to said second voice network, comprising:

a path control unit configured to:

store information identifying connection relationships between telephones in the first and second voice networks and first and second media gateways, the information including telephone numbers of the telephones in the first and second voice networks,

store connection relationships between the first and second media gateways and a plurality of label switch routers,

determine whether a first path having a residual band larger than a first band necessary for transferring a voice over Internet protocol (VoIP) packet between a first label switch router and a second label switch router exists, and

when it is determined that the first path does not exist, set a second path having a band that is equal to or more than two times the first band; and

a packet control unit configured to:

store a maximum band settable between adjacent ones of the plurality of label switch routers, and

control ~~[[a]]~~ the first media gateway and ~~[[a]]~~ the second media gateway connected to said first and second label switch routers, respectively, to transfer said VoIP packet via the first path or said second path.

9. (currently amended) The call control apparatus of claim 8, wherein the second path set by said path control unit has a band of a hundred times ~~[[of]]~~ said first band.

10-12. (canceled)

13. (currently amended) A computer program product for implementing a call control apparatus for setting a path between a first voice network and a second voice network, said computer program product comprising:

instructions for storing information identifying connection relationships between telephones in the first and second voice networks and first and second media gateways, the information including telephone numbers of telephones in the first and second voice networks;

instructions for storing a maximum band settable between adjacent ones of a plurality of label switch routers;

instructions for determining whether a first path ~~having a band larger than a band necessary~~ for transferring a voice over Internet protocol (VoIP) packet between two of the plurality of label switch routers exists;

instructions for setting, when it is determined that the first path does not exist, a new path ~~having a band that is equal to or more than two times the first band;~~ and

instructions for controlling a media gateway connected to at least a first one of said two label switch routers to transfer said VoIP packet via the first path or said new path.

14. (currently amended) The computer program product of claim 13, wherein the new path has a band that is at least one hundred times ~~the first band~~ a band necessary for transferring the VoIP packet.

15. (currently amended) A device, comprising:

a controller configured to:

store information identifying connection relationships between telephones in first and second voice networks and first and second media gateways, the information including telephone numbers of telephones in the first and second voice networks,

store a maximum band settable between adjacent ones of a plurality of label switch routers,

receive a call request associated with establishing a voice connection between a first device and a second device via a network, the voice connection using voice over Internet protocol (VoIP),

determine whether a first label switching path exists in the network between a first ~~router~~ one of the plurality of label switch routers and second ~~router~~ one of the plurality of label switch routers, the first ~~router~~ and second label switch routers being involved in routing VoIP packets between the first device and second device, and

request, when the first label switching path does not exist, that the first label switch router establish a second label switching path to the second label switch router, ~~the second label switching path having a band of at least two times a band needed for transferring a VoIP packet between the first and second devices.~~

16. (currently amended) The device of claim 15, wherein the controller is further configured to:

manage the use of labels associated with label switching in the network such that transfer of a VoIP packet from the first ~~device~~ label switch router to the second ~~device~~ label switch router through at least one other ~~device~~ label switch router uses a single label.

17. (currently amended) The device of claim 16, wherein each of the first and second ~~devices~~ label switch routers comprises an edge router and the other ~~device~~ label switch router comprises a core router.

18-20. (canceled)